

## Material: ASTM A297 Grade HG10MnN

### Standard Specification for Steel Castings, Iron-Chromium and Iron-Chromium-Nickel, Heat Resistant for General Application

**Group:** Ferrous Stainless Steel Alloys

**Sub Group:** ASTM A297/ A297M Steel Castings, Iron-Chromium and Iron-Chromium-Nickel, Heat Resistant for General Application

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade

**Belongs to the Industry:** Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.070 - 0.110	As - Cast	
Silicon	Si %	0.700 max.		
Manganese	Mn %	3.000 - 5.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.030 max.		
Chromium	Cr %	18.500 - 20.500		
Nickel	Ni %	11.500 - 13.500		
Molybdenum	Mo %	0.250 - 0.450		
Copper	Cu %	0.500 max.		
Niobium	Nb %	8*C - 1.000 max.		
Nitrogen	N %	0.200 - 0.300	<b>Mechanical Properties</b> Tensile Strength in Mpa   525 min. Yield Strength in Mpa   225 min. Elongation in %   20 min. Reduction of Area in %   - Hardness in BHN   - Impact in Joule   -	
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
J92604	UNS	USA	Casting
A743 HG10MnN	ASTM	USA	Casting
1.4832	DIN	Germany	Casting
LH 19 N 14 G	PN	Poland	Casting
J92604	UNS	USA	Casting
19 Cr 12 Ni 4 Mn	Common	-	Casting
S30409	UNS	USA	General High Temperature and General Corrosive Service

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